

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	PAGE	1 of 7
STATIONARY SOURCE AND COMPLIANCE DIVISION	APP. NUMBERS	Various
Large Coating, Printing and	PROCESSED BY	SMP
Chemical Operations Team	REVIEWED BY	
APPLICATION PROCESSING AND CALCULATIONS	DATE	12/07/07

**PERMIT TO CONSTRUCT EVALUATION
(LITHOGRAPHIC PRINTING PRESSES)**

Applicant's Name

BOWNE OF LOS ANGELES INC.

Company I.D.

140473

Mailing Address

2103 E. UNIVERSITY DRIVE, RANCHO DOMINGUEZ, CA 90220

Equipment Address

18050 CENTRAL AVE., CARSON, CA 90745

EQUIPMENT DESCRIPTION

APPLICATION NO. 475122

TITLE V PERMIT REVISION

APPLICATION NO. 475123 (MODIFICATION, PREVIOUS P/O NO. F72921, A/N 428859)

PRINTING PRESS NO. 4, LITHOGRAPHIC, HARRIS, MODEL NO. V15, SERIAL NO. CS8-8690, SIX COLOR, 36-INCH WIDE WEB FED, AIR DRY.

HISTORY

Bowne of Los Angeles submitted above permit applications with AQMD on November 1, 2007 as class I application to modify the previously permitted printing press (P/O F72921, A/N 428859) by addition of an additional color unit (from five colors to six colors).

The applicant has a Title V permit for this location. The facility operates four permitted printing presses at this location. They have requested permit shield from Rule 1128. This evaluation will cover the permit shield request. The company proposes to use Rules 1130 and 1171 compliant inks, fountain solutions, and clean-up solvents on this press. The maximum VOC content of the fountain solution will be 0.41 lbs/gal VOC content with less than 8% solvent by volume. The applicant uses blanket and roller washes with a vapor pressure <10 mm Hg. Therefore, this equipment complies with the current BACT requirements.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	PAGE	2 of 7
STATIONARY SOURCE AND COMPLIANCE DIVISION	APP. NUMBERS	Various
Large Coating, Printing and	PROCESSED BY	SMP
Chemical Operations Team	REVIEWED BY	
APPLICATION PROCESSING AND CALCULATIONS	DATE	12/07/07

Bowne of Los Angeles Inc. has a facility-wide VOC emission cap of 2040 lbs/month (68 lbs/day) for all permitted equipment and associated operations. The applicant has not requested any VOC emission increase under this project on the facility cap or equipment cap. Rules 1130 and 1171 applies to this facility and the above described equipment.

Bowne of Los Angeles Inc. is a Title V facility. An initial Title V permit was issued to this facility on June 29, 2004. The proposed permit revision is considered as a "minor permit revision" to the Title V permit, as described in Regulation XXX evaluation. The facility has not received any complaints from the public for visible emissions or nuisance odors for this location. The company not received any notice to comply or notice of violation from the District. This facility is not located within 1000 feet from any school and there will not be any emission increases exceeding Rule 212 thresholds from this project, hence, this application will not require a public notice.

PROCESS DESCRIPTION

Bowne of Los Angeles is a large sized commercial lithographic offset printing facility in the District where daily, weekly, and monthly, publications and financial forms are printed on coated and uncoated papers. The oil based printing inks are air-dried or cured in IR curing ovens. The fountain solution, as mixed, has a VOC content of 0.41 pounds per gallon. The clean-up materials comply with Rule 1171 requirements. Copies of the MSDSs for Inks and solvents are in the file. The inks with 2.02 lbs/gal (maximum) VOC content will comply with Rule 1130 requirements.

OPERATING HOURS

Average: 24 hr/day, 7 day/week, 52 weeks/year

Maximum: 24 hr/day, 7 day/week, 52 weeks/year

EMISSION CALCULATIONS

This facility will be operating under a facility-wide VOC limit of 2040 lbs/month (68 lbs/day). The proposed modification will not result in any increase in emissions from this equipment or the facility. The following calculations are performed for informational purposes only and reflect the maximum VOC emissions that can be potentially emitted from the printing press.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT STATIONARY SOURCE AND COMPLIANCE DIVISION Large Coating, Printing and Chemical Operations Team APPLICATION PROCESSING AND CALCULATIONS	PAGE	3 of 7
	APP. NUMBERS	Various
	PROCESSED BY	SMP
	REVIEWED BY	
	DATE	12/07/07

ROG EMISSION CALCULATIONS (R1/R2) for A/N 475123

Lithographic Press - IR Dry								
475123	<u>maximum</u>	<u>normal</u>				<u>ink/varnish</u>	<u>fountain</u>	<u>wash</u>
<u>hr/dy</u>	24	24		<u>Emission factor</u>	5%	100%	100%	
<u>dy/wk</u>	7	7						
<u>wk/yr</u>	52	52		<u>Control efficiency</u>	0%			
	<u>VOC</u>	<u>ave</u>	<u>max</u>		<u>ave VOC</u>	<u>max VOC</u>		
	(lb/gal)	(gal/dy)	(gal/dy)		(lb/dy)	(lb/dy)		
<u>Kramerink #1</u>	1.48	34.56	118		2.56	8.73		
<u>#2</u>	0	0	0		0.00	0.00		
<u>ink #3</u>	0	0	0		0.00	0.00		
<u>Kramer varnish</u>	1.42	2.11	7.042		0.15	0.50		
<u>UV inks</u>	0	0	0		0.00	0.00		
<u>402 web paste</u>	0.034	2	6		0.07	0.20		
<u>Anchor 2834</u>	1.94	0.625	0.625		1.21	1.21		
<u>alcohol</u>	6.6	0.75	0.75		4.95	4.95		
<u>water</u>	0	10	10		0.00	0.00		
<u>star 450 wash</u>	3.2	4	10		12.80	32.00		
<u>rollerwash 1</u>	4.98	0.25	1.75		1.25	8.72		
<u>rollerwash 2</u>	6.5	0.5	1.5		3.25	9.75		
<u>metering wash</u>	4.66	0.06	0.398		0.28	1.85		
<u>-</u>	0	0	0		0.00	0.00		
	NSR--->>>	<u>max</u>	<u>max</u>	<u>30-day</u>		AEIS--->>>	<u>ave</u>	<u>ave</u>
		(lb/hr)	(lb/dy)	(lb/dy)			(lb/hr)	(lb/yr)
<u>ROG (R1)</u>		10.14	243.33	NA			3.25	NA
<u>ROG (R2)</u>		2.83	67.92	67.92			1.10	9650.50

Rule 1401 Toxic Emissions :

The applicant has not requested any emission increases from this project. Thus, this project is expected to comply with these requirements.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	PAGE	4 of 7
STATIONARY SOURCE AND COMPLIANCE DIVISION	APP. NUMBERS	Various
Large Coating, Printing and	PROCESSED BY	SMP
Chemical Operations Team	REVIEWED BY	
APPLICATION PROCESSING AND CALCULATIONS	DATE	12/07/07

RULES/REGULATIONS

▣ *RULE 212, PUBLIC NOTIFICATION*

▼ *SECTION 212(c)(1):*

This section requires a public notice for all new or modified permit units that may emit air contaminants located within 1,000 feet from the outer boundary of a school. This source is not located within 1,000 feet from the outer boundary of a school. Therefore, public notice will not be required by this section.

▼ *SECTION 212(c)(2):*

This section requires a public notice for all new or modified facilities which have on-site emission increases exceeding any of the daily maximums as specified by in the table below. As shown in the following table, the emission increases do exceed the daily maximum limits. Therefore, this application will be subject to this section.

LB/DAY	CO	NOX	PM ₁₀	ROG	SOx	Pb
MAX. LIMIT	220	40	30	30	60	3
INCREASES	0	0	0	0	0	0

▼ *SECTION 212(c)(3):*

Please, see Rule 1401 evaluation section.

▼ *SECTION 212(g):*

This section requires a public notice for all new or modified permit units which have emission increases exceeding any of the daily maximums as specified below. As shown in the following table, the emission increases do exceed the daily maximum limits. Therefore, this application will be subject to this section.

LB/DAY	CO	NOX	PM ₁₀	ROG	SOx	Pb
MAX. LIMIT	220	40	30	30	60	3
INCREASES	0	0	0	0	0	0

▣ *RULES 401 & 402, VISIBLE EMISSIONS & NUISANCE*

Compliance with these rules is expected with the proper operation of the equipment.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	PAGE	5 of 7
STATIONARY SOURCE AND COMPLIANCE DIVISION	APP. NUMBERS	Various
Large Coating, Printing and	PROCESSED BY	SMP
Chemical Operations Team	REVIEWED BY	
APPLICATION PROCESSING AND CALCULATIONS	DATE	12/07/07

▣ **RULE 1130, GRAPHIC ARTS**

▼ **SECTION (C)(1), VOC CONTENT OF INKS**

This paragraph limits the maximum VOC content of printing inks, coatings, and adhesives at 300 g/l less water and exempt compounds. The applicant is in compliance with these requirements by using inks and coatings with the following VOC content less water and exempt compounds.

Materials Used	Rule VOC Limit (gram/liter)	VOC as applied (gram/liter)	Compliance
Kramer Litho Rotary Inks	300	82	Yes
Kramer Litho Conventional Inks	300	138	Yes
Kramer Litho Oil Base Varnish	300	243	Yes

▣ **RULE 1130, GRAPHIC ARTS**

▼ **SECTION (C)(2), VOC CONTENT OF FOUNTAIN SOLUTION**

This paragraph limits the maximum VOC content of fountain solution at 100 g/l. The applicant is in compliance with these requirements by using fountain solution with the following VOC content.

Materials Mixed (A/N 428856/7)	Volume Gal.	VOC Content (lb/gal)	VOC Content Lbs	VOC (lb/gal)	Rule VOC Limit (lb/gal)	Compliance
Webfount 100	1.25	0.94	1.175			
IPA	1	6.55	6.55			
Water	16.75	-0-	-0-			
Total	19		7.725	0.407	0.8	Yes

▣ **RULE 1171, SOLVENT CLEANING OPERATIONS**

According to MSDS provided by the applicant, clean-up materials will comply with the Rule requirements.

Material Used	Rule VOC Limit (gm/liter)	VOC as Applied (gm/liter)	Compliance
PS LVC-TW Wash	500	372	Yes
Star 525 Wash	500	492	Yes
MRC-F Metering Roller Cleaner	500	492	Yes

REGULATION XIII

▣ **RULE 1303(a), BEST AVAILABLE CONTROL TECHNOLOGY (BACT)**

(a) VOC EMISSIONS

Low VOC inks and fountain solution with less than 8% VOCs by volume will satisfy BACT requirements. See following table for calculations.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT STATIONARY SOURCE AND COMPLIANCE DIVISION Large Coating, Printing and Chemical Operations Team APPLICATION PROCESSING AND CALCULATIONS	PAGE	6 of 7
	APP. NUMBERS	Various
	PROCESSED BY	SMP
	REVIEWED BY	
	DATE	12/07/07

Materials Mixed (A/N 428856/7)	Volume Gal	VOC Content (lb/gal)	VOC Content Lbs	VOC Volume gal	VOC Volume Percentage
Webfount 100	1.25	0.94	1.175	0.128	
IPA	1	6.55	6.55	0.992	
Water	16.75	-0-	-0-	-0-	
Total	19		7.725	1.12	5.9

▣ **RULE 1303(b)(1), MODELING**

No detailed modeling analysis is required for VOC emissions only.

▣ **RULE 1303 (b)(2), EMISSION OFFSETS**

The applicant did not request any emission increases from this modification project. Hence, emission offsets are not required for this project.

▣ **RULE 1401, NEW SOURCE REVIEW OF CARCINOGENIC AIR CONTAMINANTS**

As indicated above there are no emission increases from this project. Thus, this project is expected to comply with the requirements.

REGULATION XXX

The proposed project is considered as a “minor permit revision” to the current Title V permit for this facility since there is not an emission increase of pollutants subject to Reg. XIII or hazardous air pollutants. Rule 3000(b)(12) defines a “minor permit revision” as any Title V permit revision that does not result in any of the following:

- Emission increase of RECLAIM pollutants over the facility starting Allocation plus nontradeable Allocations, or a higher Allocation amount which has previously undergone a significant permit revision process,
- Emission increase in hazardous air pollutants (HAPs) or pollutants subject to Reg. XIII, or
- Installation of a new permit unit or the modification or reconstruction of an existing permit unit subject to a New Source Performance Standard (NSPS) per 40 CFR Part 60 or a National Emission Standard for HAPs per 40 CFR Part 61 or Part 63.

Rule 3003(j) specifies that all proposed Title V permit revisions shall be submitted to EPA for review. This is the first permit revision requested by the facility. The cumulative emission increases resulting from this proposed permit revision are summarized as follows:

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT STATIONARY SOURCE AND COMPLIANCE DIVISION Large Coating, Printing and Chemical Operations Team APPLICATION PROCESSING AND CALCULATIONS	PAGE	7 of 7
	APP. NUMBERS	Various
	PROCESSED BY	SMP
	REVIEWED BY	
	DATE	12/07/07

Revision	HAP	VOC	NOx	PM ₁₀	SOx	CO
1 st Permit Revision: Modify press with A/N 428859	0	0	0	0	0	0
Total Emissions Increase Since the Issuance of Initial Title V Permit	0	0	0	0	0	0
Maximum Daily Threshold	30	30	40	30	60	220

CONCLUSIONS/RECOMMENDATIONS

The proposed project is expected to comply with all applicable District Rules and Regulations. Since the proposed project is considered as a “minor permit revision”, it is exempt from the public participation requirements under Rule 3006 (b). A proposed permit incorporating this permit revision will be submitted to EPA for a 45-day review pursuant to Rule 3003(j). If EPA does not have any objections within the review period, a revised Title V permit will be issued to this facility.